

Claims

- [1] A master spindle for a tapping machine, comprising:
a chuck having a tap detachably mounted thereto;
a chuck support member having the chuck mounted thereto;
a spindle bolt fastened to the chuck support member at an upper end thereof;
and
a bushing nut threadedly coupled to the spindle bolt and positioned below the chuck support member;
wherein the chuck support member has an upper end to which the chuck is mounted and a lower end to which the spindle bolt is fastened, the upper and lower ends being integrally formed with each other.
- [2] The master spindle according to claim 1, wherein the chuck support member has a length which is less than that of a conventional chuck support member.
- [3] The master spindle according to claim 1, wherein an umbrella-shaped chip cover is provided to the lower end of the chuck support member.
- [4] The master spindle according to claim 1, wherein the chuck support member is provided with a fluctuation correcting cap.
- [5] The master spindle according to claim 4, wherein the fluctuation correcting cap is defined with an opening into which the chuck support member is fitted so that a circumferential outer surface of the chuck support member is brought into tight contact with a circumferential inner surface of the fluctuation correcting cap, and has a flange portion which is coupled to the bushing nut by bolts; and wherein an O-ring is fitted in the circumferential inner surface of the fluctuation correcting cap adjacent to an upper end of the fluctuation correcting cap, and an oil inlet hole is defined through the fluctuation correcting cap to communicate with the opening.
- [6] The master spindle according to claim 1, wherein the chuck support member is defined, below the chuck, with a tap separation hole for easy separation of the tap from the chuck.
- [7] The master spindle according to claim 1, wherein the bushing nut has a flange portion which is defined with mounting holes and auxiliary mounting holes.